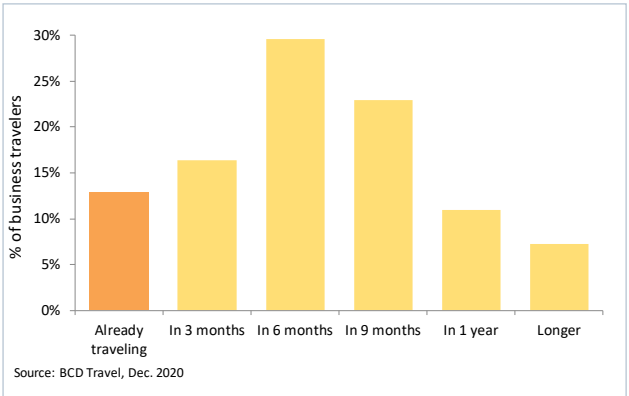
December 2020

Getting back to business travel
The path back to safe travel: Vaccines and more

COVID-19 has proved to be an incredibly powerful disruptor of travel. It's now been nine months since the World Health Organization's (WHO) March 2020 pandemic declaration, and travel has so far returned only to modest levels. Just under 15% of business travelers are now traveling regularly (Figure 1). A further 16% expect to start traveling again during the first quarter of 2021, with another 30% joining them in the second quarter. By the middle of 2021, this means that almost 60% of travelers expect to be traveling regularly again. And by the end of 2021, this figure could be above 90%. These are some of the encouraging findings of a survey we conducted among a panel of 702 business travelers between November 30 and December 4, 2020.

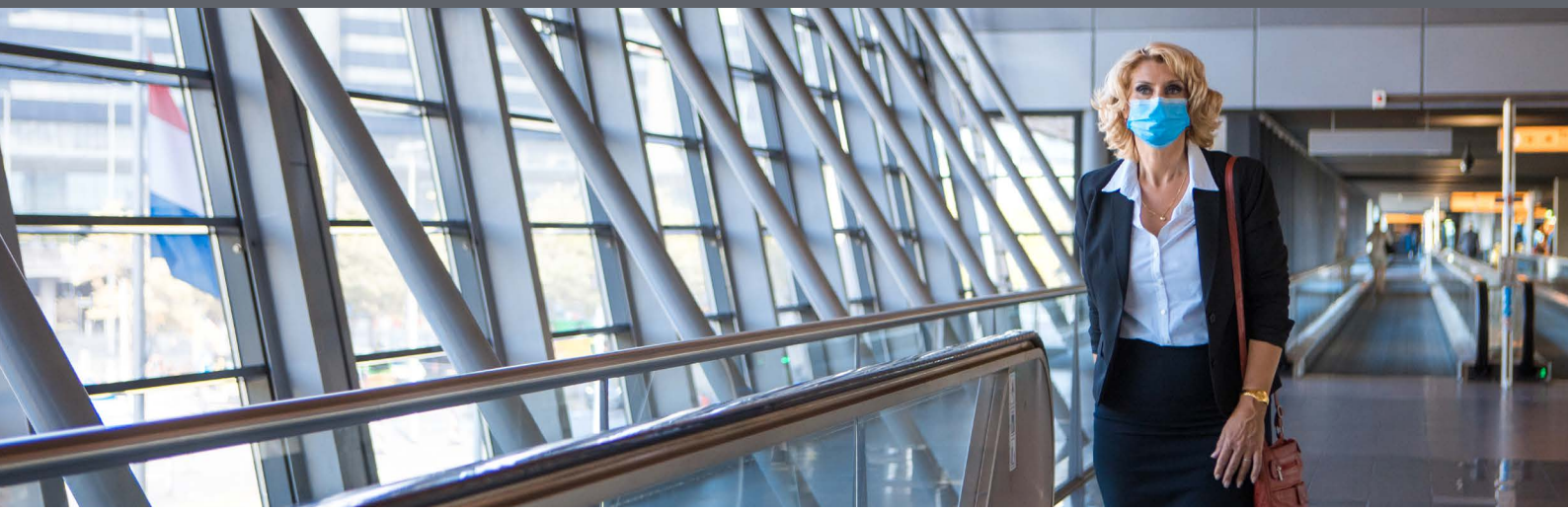
Figure 1: When will business travel resume?



The drive towards a sustained rebound in travel relies on confidence among travelers and national authorities being restored. A number of developments will help to make this a reality:

- An end to or easing of national lockdowns
- Wide distribution of an effective vaccine
- Testing available pre-departure and on-arrival at airports and via airlines
- Digital health passports
- Travel corridors introduced between key international markets

The path back to safe and unrestricted business travel is beginning to become much clearer, particularly with the imminent availability of a vaccine. But a vaccine is not the only solution. This document explores the various developments that will underpin the resumption of travel. It's supported by the findings of our survey of business travelers.



The easing of lockdowns

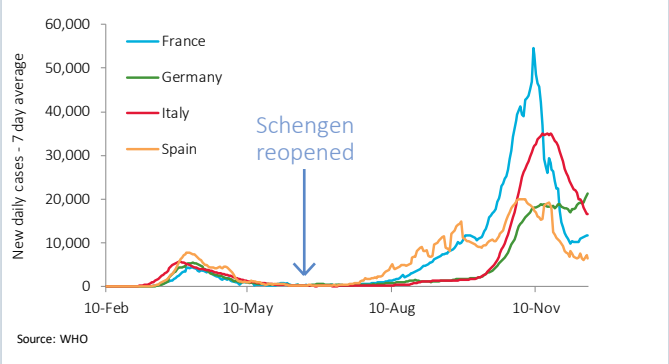
Countries are increasingly adopting a numbers-based approach to help determine when international travel restrictions should be eased. COVID-19 case numbers have become even more important in determining the recovery of travel.

COVID-19 cases matter

The number of reported new daily cases of COVID-19 is key to determining when governments decide to reopen their international borders to regular travel. The **European Union** (EU) provides a good example of this. Only once the infection curves had fallen sufficiently after the first wave of COVID-19 cases did the **Schengen Area** reopen for international travel in mid-June 2020 (Figure 2).

Since then, the **EU** has adopted a *Common Approach* across all member states to assess the COVID-19 infection risk in countries and regions based on targets for rates of notification, test positivity and testing.[1] Many other countries have adopted a similar approach or are likely to do so in the future. As they make real progress in dealing with COVID-19's second wave, it will not be long before **European countries** are able to reopen their borders with other member states, although some care will need to be taken over the Christmas and New Year holiday.

Figure 2: Lockdowns and COVID-19 daily rates



Travel restrictions are easing

The number of destinations closed to international travel continues to fall. Of the 217 global destinations tracked by the World Tourism Organization in its *Travel Restrictions Report*, 152 had eased restrictions on international tourism as of November 1, 2020.[2] That's an improvement on the 115 recorded on September 1. The number of destinations, which have kept their international borders closed, dropped from 93 to 59 over the same period.

These figures were, of course, published before much of **Europe** entered lockdown to defend against a COVID-19 second wave, but by December 2020, many may once again begin easing restrictions. Globally, countries most likely to ease restrictions are those embracing a risk-based approach. The majority of those keeping their borders closed are in **Asia Pacific**.

Lockdown fatigue

As we move into 2021, governments appear keen to reduce their reliance on lockdowns as a means to control the spread of the virus. While they have clearly been effective in bringing down infections, lockdown fatigue among the population may begin to reduce their effectiveness, while there are growing concerns about the damage caused by closing down large parts of national economies. The availability of an effective vaccine should be an important first step towards more sophisticated strategies that support government efforts to contain COVID-19, while allowing people to start getting their lives back to normal. This *normal* will include the resumption of regular travel.

[1] *European Commission, A common approach to travel measures in the EU*
[2] *UNWTO, Travel Restrictions Report, Eighth Edition, Dec. 2, 2020*

Vaccine

Global vaccination may take two-to-four years and annual renewal may be needed. Advanced economies may adequately vaccinate their populations within a year. Proof of vaccination may be required for some international journeys.

Countries are unlikely to have equal access to the vaccine

Pfizer/BioNTech, Moderna and AstraZeneca are among the first high-profile pharmaceutical companies offering vaccines capable of effectively protecting against COVID-19. However, the need for each vaccine to be stored at very low temperatures poses logistical problems for distribution, particularly in emerging markets where such infrastructure is less likely to exist.

Vaccine availability will vary by region, with **Europe, North America** and other advanced economies using their financial strength to secure a place at the head of the queue. Indeed, at the beginning of December 2020, the **U.K.** became the first country in the world to approve the Pfizer/BioNTech vaccine for widespread use, beginning a vaccination program from the second week of the month.[3] The **U.S.** followed the **U.K.** in approving the vaccine. Wealthier countries will achieve meaningful immunization rates earlier than others. It may take some time for the vaccine to filter into other parts of the world. **Indian** pharmaceutical company Zydus Cadila claims it could take up to four years to vaccinate the world's population against COVID-19.[4]

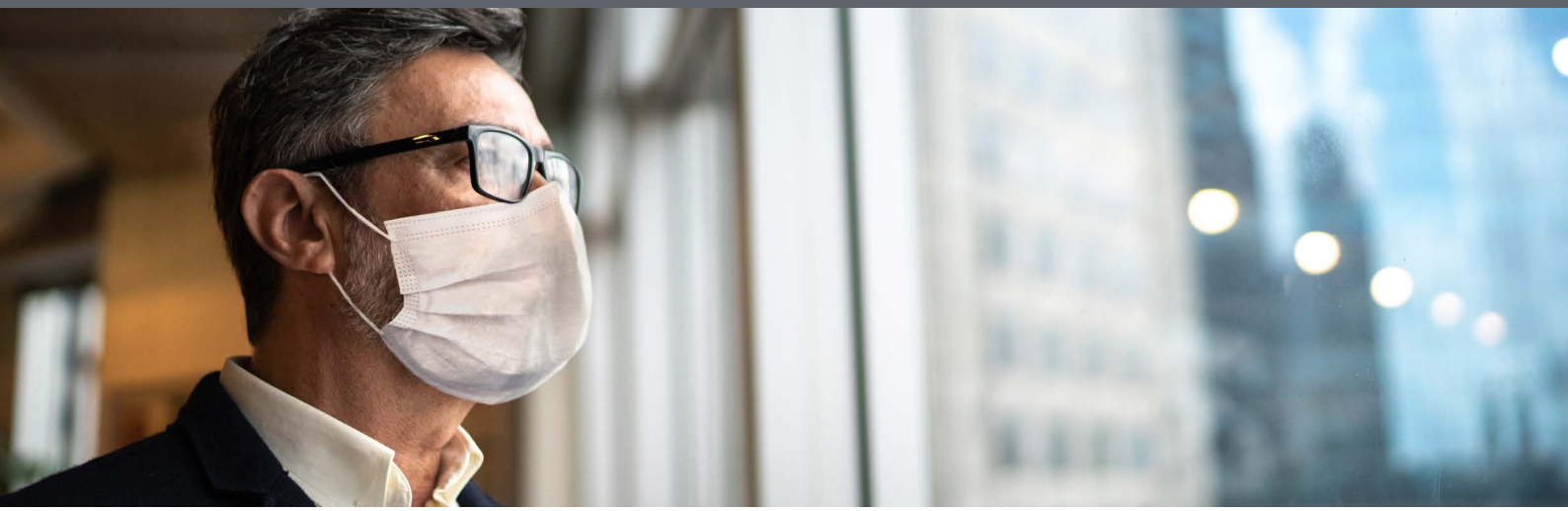
To achieve global coverage, vaccines need to be both effective and affordable. And there may need to be an annual immunization program thereafter. Cadila Healthcare Ltd aims to have its vaccine ready during the second quarter of 2021. As its vaccine will be easier to produce, it will help improve availability in the **Middle East, Southeast Asia** and **Latin America**.

As "COVID-19 anywhere is COVID-19 everywhere," it's important that low- and middle-income countries have fair access to vaccines.[5] This is the role being played by the COVAX Advance Market Commitment (AMC) of Gavi, the Vaccine Alliance. It will provide funding for vaccines with greater potential for large-scale manufacture, temperature stability and low-cost production. Until safe and effective vaccines are available, diagnostic tests and therapeutics will remain vital to fight the pandemic and save lives.

> "COVID-19 anywhere is COVID-19 everywhere."

Even once a vaccine is approved and rolled out in a country where the infrastructure needed to deliver it is already in place- such as the **U.K.**- it could take between six months to one year before everyone is vaccinated.[6] With sufficient stocks of the vaccine and trained staff dedicated solely to a vaccination program, it's expected to take eight months to vaccinate the **U.K.** population. Many countries may also follow the **U.K.** in adopting a phased approach, vaccinating the most vulnerable members of society and health workers first, and then ensuring everyone aged over 50 years can be vaccinated, before making the vaccine available to other age groups. And with governments purchasing most stocks of available vaccine, travelers may find it difficult to get vaccinated ahead of schedule through a private clinic.

[3] *BBC, Dec. 2, 2020*
[4] *The National, Nov. 18, 2020*
[5] *Gates Foundation, Nov. 12, 2020*
[6] *The BMJ, Oct. 1, 2020*

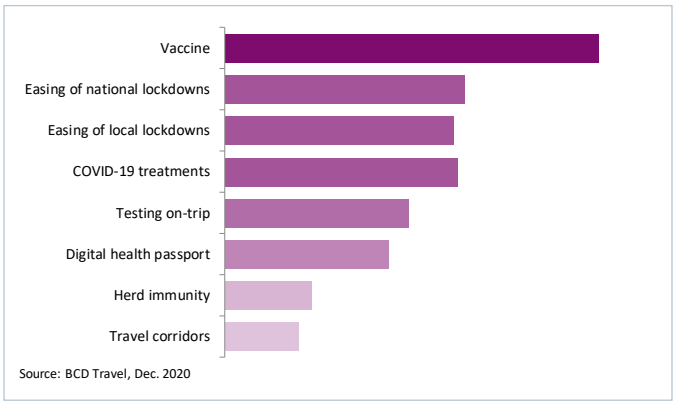


Funding, procurement, storage and distribution will determine how quickly a vaccine becomes widely available. Countries must also decide to which vaccine they commit. Should they invest now to enable the distribution of the Pfizer/BioNTech vaccine or delay in the hope that a more effective, easier to transport and store, and possibly cheaper alternative becomes available?[7] The winners may be those countries that have already pre-contracted for substantial amounts of vaccine doses from multiple suppliers, spreading their bets to ensure early access. As there won't initially be enough doses to treat everyone, countries must choose which sections of the population to prioritize.

The vaccine's impact on travel

Having access to a workable vaccine is seen as by far the most important catalyst for promoting the restart of business travel. That's the view from the business travelers we surveyed between November 30 and December 4, 2020.[8] Vaccines attracted 55% more responses than the next most popular options: the easing of national and local travel restrictions and improvements in the treatment of COVID-19 infections (Figure 3).

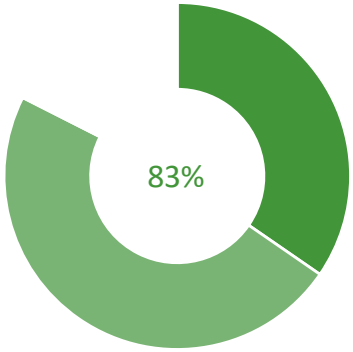
Figure 3: Top measures needed for business travel to resume



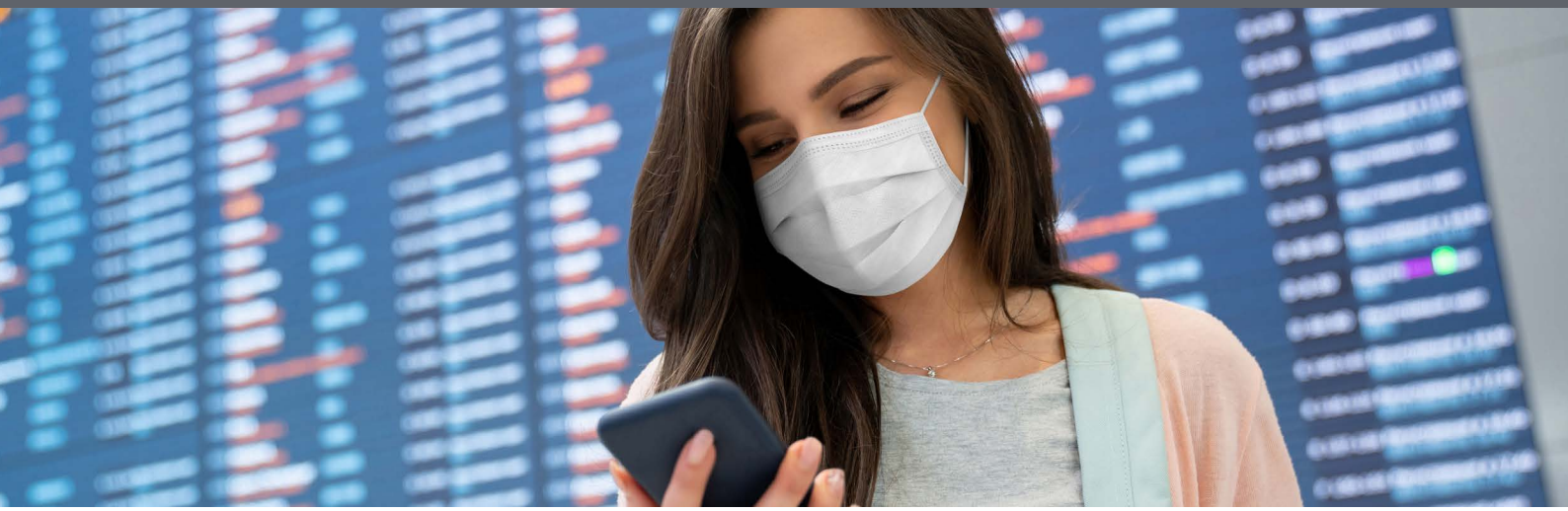
Rather than delivering a step change, however, a vaccine is likely to be part of an evolving set of measures, which include COVID-19 testing, travel corridors and digital health passports, although these don't yet seem to rate as highly on business travelers' expectations.[9]

In future, as well as a negative test result, travelers may need proof of having been vaccinated for COVID-19 before being allowed to travel to certain destinations. This will require international agreement on the acceptability of each individual vaccine, which could take some time. Some governments may not accept certain vaccines (as being effective enough). It will take some time before the vaccine can feed through to reduced quarantine times and greater travel freedom. Even so, business travelers have welcomed the recent news on vaccine development, with more than 80% seeing it as either an extremely positive or somewhat positive development in giving them confidence about future travel.

> Most travelers see vaccine development as an extremely positive or somewhat positive development.



[7] *The Conversation, Nov. 17, 2020*
[8] *BCD Travel*
[9] *BTN, Nov. 16, 2020, Vaccines promising, but temper your enthusiasm*



Any delay in the wide availability of a vaccine could present a challenge for international travelers, particularly if other airlines follow the lead of **Australian** airline Qantas and make vaccination a condition of travel. The airline's CEO, Alan Joyce, has made it clear that vaccination will be a requirement for anyone trying to board one of its international services, once a safe and effective vaccine becomes readily available.[10] As extreme as this measure might sound, it's unlikely to present an obstacle to travel, or be of much concern to most business travelers, given that more than 70% are likely to take a COVID-19 vaccine, once it's available (Figure 4). However, this still leaves more than one in five travelers potentially facing some limitations on their travel options and presents a real challenge to the 4% who definitely won't take the vaccine.

The reality may not be as simple as these figures suggest. When making their final decision about taking the COVID-19 vaccine, travelers will take into a consideration a number of factors (Figure 5). By far the most important factor is the risk of any side effects arising from vaccination. Such concerns may be offset in part by the availability of independent medical reviews. The fact that vaccination might be required for travel is seen as much less important to the final decision. But these influencing factors, and their relative importance, will be key to helping travelers make informed decisions about vaccination, should it be a prerequisite for travel.

David Powell, medical advisor for IATA, believes other airlines, especially those in countries with low levels of COVID-19 transmission, will follow Qantas and require proof of vaccination.[11] He concedes this could only happen once the vaccine is widely available, which IATA doesn't expect until the middle of 2021 at the earliest. Until then, government-agreed standardized testing protocols could help to replace border closures and quarantines.

Figure 4: Travelers' views on taking a COVID-19 vaccine

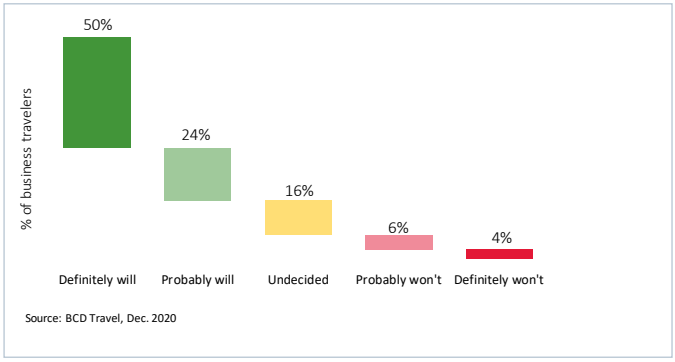
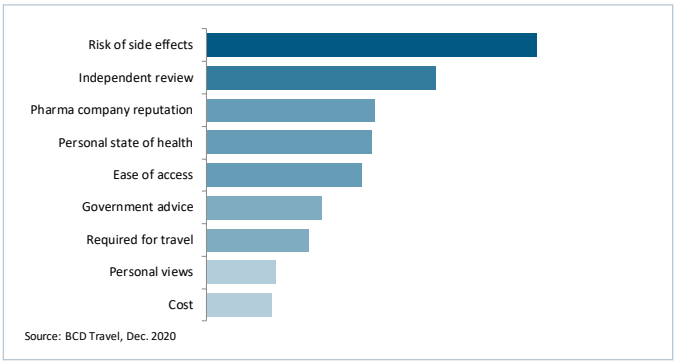


Figure 5: Vaccine decision: Issues to consider



Other COVID-19 measures must remain in place

Herd immunity via vaccination, which for COVID-19 requires effective immunization of at least two-thirds of the population, will remain a long way off. That means strategies aimed at reducing the spread of COVID-19, including social distancing, the wearing of face masks, testing and quarantine measures will be required by authorities for some time. Eventually, the vaccine should be enough on its own to facilitate travel freedom, i.e. without the need for quarantine. Until this is the case, the travel industry will need to rely on a range of more specific measures, including travel corridors, pre-departure and post-arrival testing, digital health passports and track & trace apps.

[10] *Qantas Group, Market Update, Dec. 3, 2020*
[11] *Travel Weekly, Nov. 23, 2020*

Travel corridors

Seen as a useful tool early on in the pandemic, bilateral travel corridors have not been widely used. Many countries have instead opted for a simpler approach, compiling lists of safe countries, for which quarantine-on-arrival periods are reduced or not required.

Enabling travel between two countries

In the early days of the pandemic, travel corridors or "bubbles" were seen as a useful tool for enabling travel between two countries, particularly where COVID-19 infection rates were low or under control. Such formal arrangements have been used mainly in **Asia Pacific**. For example, under the Business Track framework, Japan has created corridors allowing short-term business travel with countries including **China, Singapore, South Korea** and **Vietnam**.[12] Travelers covered by the scheme are allowed to conduct limited business activities, such as traveling between home and the office, during the 14-day stay at home quarantine period.

Travel in a corridor is often subject to strict rules and conditions. For example, under the recent agreement between **China** and **Japan**, in order to relax quarantine restrictions, travelers must test negative for COVID-19 and submit an itinerary of their activities in advance. When in **Japan, Chinese** business travelers should keep their activities to a minimum, not use public transportation and avoid contact with random people or crowds.

The limitations of the travel corridor approach are demonstrated by **Hong Kong-Singapore**, whose corridor launch has been delayed into 2021 because of a spike in COVID-19 cases in **Hong Kong**. Once operational, the corridor will initially permit only one flight per day between the two countries, with passenger numbers capped at 200 per flight. The level of pent up demand may make it difficult to get a seat, and risks creating an environment in which unusually high air fares might appear. And as passengers must still test for COVID-19 on departure and on arrival, there is still a risk of quarantine at the destination.

Many countries have taken a less sophisticated approach to travel corridors, simply creating a list of countries where rates of COVID-19 infection are regarded to be low enough to present minimal risk. Visitors from these countries are typically allowed to travel without the need to quarantine after arriving at the destination.

Other countries have adopted a tiered approach to classifying areas. The Common Approach adopted by the **European Union** (EU) classifies member states on a four-color scale according to rates for COVID-19 notification, test positivity and testing.[13] Travelers arriving from green areas should face no restrictions; those from orange and red areas could be required to undergo quarantine/self-isolation or COVID-19 testing prior to, or on arrival. It is up to individual member states to decide on the restrictions applied to travelers arriving from these countries. Information on which member states apply what measures can be found in the Re-open EU website.[14]

> Travelers should check the status of their destination before departure to see if it is on a travel safe-list.

Countries featuring on "safe" lists will change as infection rates rise and fall, so travelers must be sure to check the status of their destination before departure. Countries can be added to or removed from corridor lists at short notice, creating uncertainty and increasing the risk of travel disruption. As acceptable means of rapid testing pre-departure and on-arrival become more widely available, travel corridors could lose their appeal as a useful tool for enabling and managing safe international travel.

[12] *Ministry of Foreign Affairs of Japan, Phased measure for resuming cross-border travel*
[13] *European Commission, A common approach to travel measures in the EU*
[14] *Re-open EU*

Testing

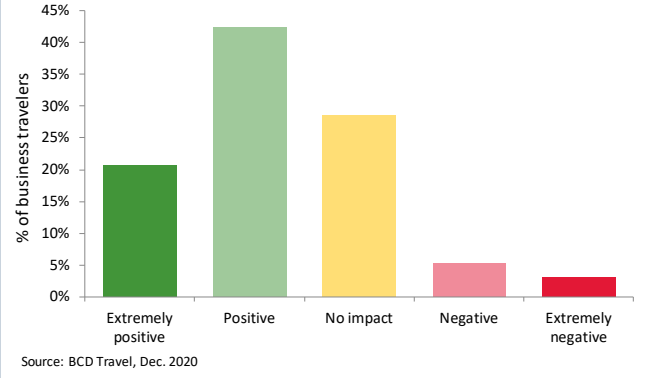
Until a vaccine is widely available, testing may be the best way for travel to resume safely. Airports and airlines are helping to increase the availability of on-departure and on-arrival testing to help reduce or eliminate quarantine periods.

Testing enables travel to resume safely

Until vaccines are widely available, carefully implemented and managed COVID-19 testing may be the best way for resuming travel safely, and without the need for quarantine. Some countries already mandate testing pre-departure or on-arrival as a condition of entry, and even then, a (shortened) period of quarantine may still be required.

Business travelers generally have a positive attitude towards pre-departure testing, with more than 60% encouraged by its availability, with less than 10% viewing it negatively (Figure 6).

Figure 6: Travelers' views on pre-departure airport testing



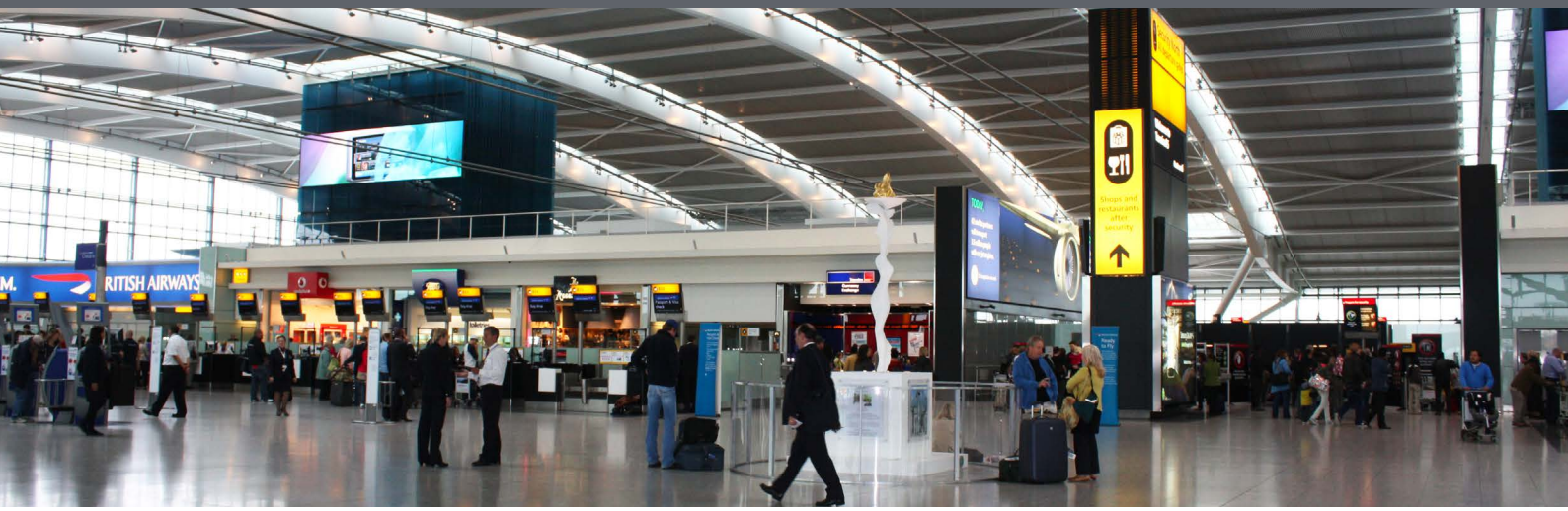
In launching its "test to release" program in December 2020, the **U.K.** government aims to reduce the period of self-isolation for travelers arriving from countries not on its travel corridor safe list from 14 days to a minimum of 5 days. Passengers must take a COVID-19 test after arrival (not at the airport), provided by private companies and paid for by the passenger.[15]

Travelers do not appear resistant to the idea of being tested. In a survey conducted by industry advocacy group Travel Again, 70% of **U.S.** business travelers indicated a willingness to take multiple COVID-19 tests before and during travel and share their results, in order to resume traveling without restrictions.[16]

Testing still poses the risk of a disrupted journey should a passenger receive a positive result at any stage, leading to varying degrees of inconvenience. Being told to return home following a positive result at the airport pre-departure is arguably better than having to deal with the consequences of a receiving a positive result on arrival in a foreign country.

> Most travelers are happy to be tested for COVID-19 and share their results.

[15] BTN Europe, Nov. 9, 2020
[16] BTN, Dec. 2, 2020



Airports are testing

Testing on-arrival is already well-established at some airports as part of local authorities' efforts to prevent passengers importing new COVID-19 cases. But it's rarely as simple as taking just a test at the airport. Anyone arriving in **China** at one of its gateway airports is subject to a health check, which may include COVID-19 tests, which must be paid for, and which are conducted off-airport at government-appointed locations. Also at their own cost, all travelers (including **Chinese** citizens) must stay at a designated hotel whilst waiting for their test results. Foreign travelers must quarantine at a designated hotel for 14 days.[17]

On arrival at **Hong Kong** International Airport (HKIA) all passengers are tested at the airport's Temporary Specimen Collection Centre (TSCC), where they must remain while waiting for their RT-PCR test results, which are usually available on the same day, before proceeding to immigration and baggage reclaim.[18] To reduce the inconvenience, **Hong Kong** is now trialing LAMP tests capable of delivering results within 30 minutes, compared with 3-6 hours for the RT-PCR test.[19] If successful, LAMP tests will also be rolled out to outbound travelers, who can save time and money by testing at the airport before boarding their flight.

> Airports around the world are offering pre-departure testing.

Airports around the world are offering passengers pre-departure testing to satisfy the entry requirements of their destinations or to help reduce or eliminate quarantine periods. On-airport testing, such as that offered by **Tokyo** Narita Airport, can provide a negative test result certificate within 2 hours.[20] Passengers must normally bear the extra cost of the test. Based on the testing offered at **Frankfurt** Airport, costs could range from €59 ($72) for results delivered within 12 hours, rising to €139 ($168) for rapid results within 6 hours.[21] Most testing is conducted pre-departure rather than on-departure, so passengers will need to arrive extra early for their flight, or make a pre-trip visit to the airport purely to get tested.

Test costs can vary significantly between airports. **Dublin** Airport charges departing passengers €99 ($120) for a test with results available the next day. An express LAMP test, with results in 5 hours, is also available at a cost of €199 ($241).

[17] *UK. Gov, FCO, China*
[18] *HKIA, Compulsory Quarantine and COVID-19 Testing*
[19] *Hong Kong Free Press, Oct. 28, 2020*
[20] *Japan Times, Oct. 22, 2020*
[21] *Centogene, Improved Travel with Coronavirus Testing*

Airlines are testing too

U.S. airlines have been particularly responsive in offering COVID-19 tests to their passengers, initially to help them travel from the mainland to **Hawaii** and **Alaska** without the need to quarantine on arrival. Testing means an extra cost to travelers, which can vary significantly depending on whether the test is performed in a clinic or at home, how quickly results are available, and how close to flight departure the test is taken. Passengers might pay as little as $80 for a test self-administered at home with results provided within 48 hours, or $250 to be tested at the airport on day of departure, with results returned within the hour.

While testing at home, under the remote supervision of a healthcare professional, is a popular option, a 48-hour wait for results makes it unsuitable for last-minute trips. Airlines are trying to offer more testing at airports or clinics to speed up results.

U.S. airlines are also offering tests for flights to international destinations, particularly in the **Caribbean** and in **Central and South America**. They're also working with their **European** airline partners to trial COVID-19-free **transatlantic** flights, so that passengers may avoid quarantine on arrival in **Europe**. Passengers have the option of a PCR test taken up to 72 hours before departure, or a rapid test at their **U.S.** departure airport or on arrival in **Europe**.

RT-PCR, RT-LAMP, rapid antigen or antibody? With such an array of different tests on offer, whether they are being tested by an airport or their airline, travelers need to confirm that both the type of test and the certificate confirming a negative result are accepted in their destination.

COVID-19 test types[22]

Antigen test

This rapid diagnostic test (RDT) may return a result as quickly as 30 minutes. Using a sample from a person's respiratory tract, it detects the presence of viral proteins (antigens). Such tests detect the antigens only with actual infection when the virus is replicating, i.e. the tests will identify acute or early infection. Positive and negative predictive values for use as a screening test in the general population have yet to be determined.

RT-PCR

The reverse transcription polymerase chain reaction molecular test detects the presence of RNA (nucleic acid) in a respiratory tract specimen. The viral load determines what counts as a positive result, which is interpreted as diagnostic of active COVID-19 infection. A negative result may be interpreted as an absence of active infection, but it may also be a "false negative" if an insufficient sample has been collected, or if the sample was collected early in the incubation period. Positive and negative predictive values for use as a screening test in the general population have yet to be determined.

Antibody test

This measures immuno-logical proteins produced by the body specifically towards viral antigens. IgM antibodies measure "immediate" response over days. IgG antibodies measure a longer-term response over weeks to months. It's not certain whether such antibodies are actually protective, or for how long.

Antibody tests are designed to be highly specific, i.e. with a low false positive rate, for other types of viral infections. Positive and negative predictive values for use as a screening test in the general population have yet to be determined.

LAMP test

Developed by Oxford University, the loop-mediated isothermal amplification (or LAMP) test can be processed quickly and without being sent to a laboratory.

It measures nucleic acid (RNA) during the acute phase of infection. It is similar to PCR testing in its application.

[22] World Health Organization, *Advice on the use of point-of-care immunodiagnostic tests for COVID-19*

Digital health passports

An app that allows border agencies to securely verify the health status of arriving travelers could be the true post-pandemic travel enabler. The development of four different digital health passports may present a challenge for adoption.

Digital health passports may prove to be the true travel enabler, confirming that someone is healthy enough to travel, while supporting travelers with the information needed for a seamless journey, as they navigate the various the rules and restrictions associated with COVID-19. When combined with reliable testing, digital health passports should help to restore confidence in international travel among both travelers and the authorities by offering a secure and verifiable way to document and confirm a traveler's health status.

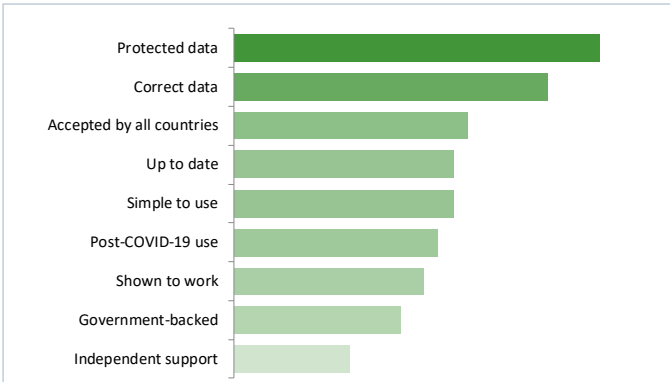
For digital health passports to be a successful tool, IATA claims they should enable:

- Governments to verify test authenticity and the traveler's identity
- Airlines to provide accurate information to passengers about testing requirements, and verify these have been met
- Laboratories to issue digital certificates, recognized and accepted by governments
- Travelers to access accurate information on test requirements and testing/vaccination locations, and to communicate information to airlines and border authorities

> Digital health passports should help to restore confidence in international travel among both travelers and the authorities by offering a secure and verifiable way to document and confirm a traveler's health status.

From a traveler's perspective, data will be the issue that's most critical to the successful adoption of digital health passports. Most importantly, their personal data must be protected; and it must be correct too (Figure 7). The passports must also be simple to use, ensure all information is regularly updated and be accepted globally.

Figure 7: What will make digital health passports a success?



To date, at least four different apps are in various stages of development. If standardization is the end goal, competition may not be helpful. Travelers may find they need a different app depending on the airline they use or the destination they're traveling to. While many travelers already have multiple airline apps on their mobile phones, do they really need multiple digital health passport apps too? Travel during a pandemic has become complex enough without having to choose the right digital health passport. At the risk of paraphrasing JRR Tolkien, perhaps there simply needs to be *one app to rule them all*. Here's the progress made to date by four digital health passport apps.

[15] Gov. UK, *European Health Insurance Card*

ICC AOKpass

Launched in June 2020 by the International Chamber of Commerce (ICC) and medical and security services company International SOS, the ICC AOKpass mobile app allows users to present digitally authenticated, secure and portable copies of medical records to government authorities, border agencies and employers, without compromising personal data.[23] Backed by blockchain technology, the app allows users to maintain full control over their medical information, which is stored securely and privately only on their mobile device, and not in some central location.[24]

ICC AOKpass is already used for travel between **Abu Dhabi** and **Pakistan**. It has also been selected to verify the pre-departure COVID-19 tests required by passengers flying with Alitalia or Delta Air Lines on trial quarantine-free flights between **Atlanta** and **Rome** launched in December 2020.[25] By being one of the first apps to launch, ICC hopes AOKpass will help set "much-needed" global standards for cross-border travel, allowing its use in any jurisdiction.

VeriFLY®

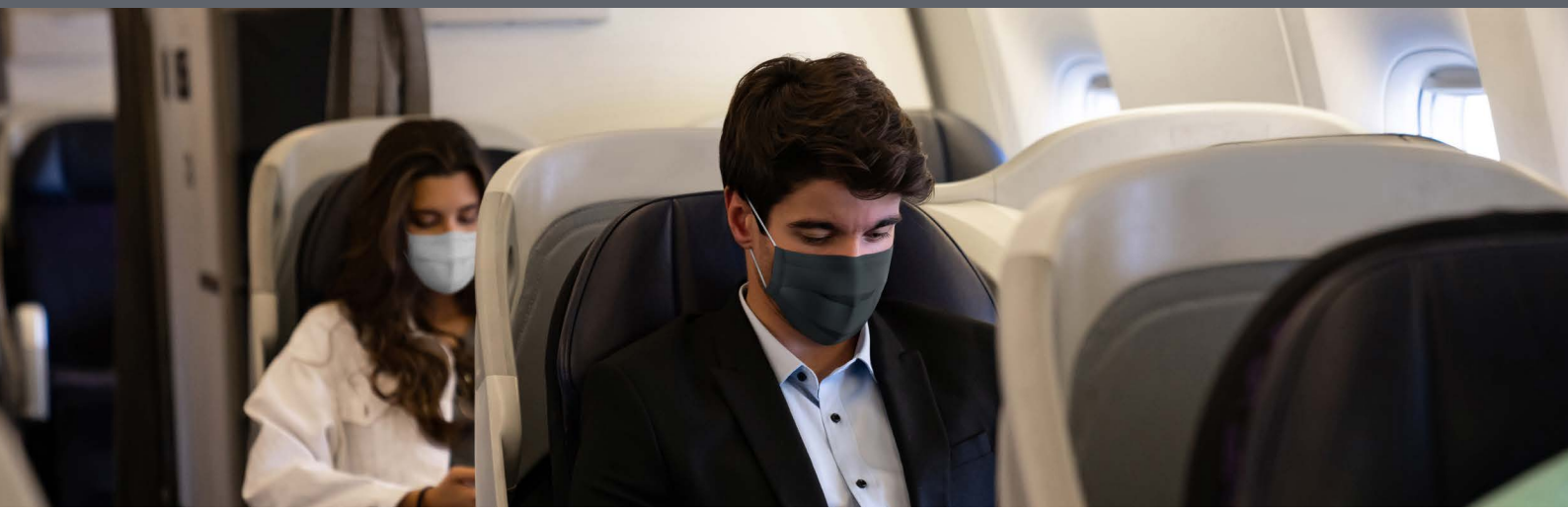
Produced by identity assurance company Daon, the VeriFLY® mobile wellness wallet is designed to help travelers understand the COVID-19 requirements at their destination and streamline airport check-in by digitally verifying that such requirements have been met.[26] It allows real-time verification of COVID-related credentials, such as diagnostic test results, health questionnaires and (in future) proof of vaccination.[27] Customers flying with American Airlines from **Miami** to **Chile** and **Jamaica** are able to test VeriFLY at no cost by creating a secure profile and confirming details for their trip.

[23] ICC, *Nov. 23, 2020*
[24] ICC, *May 6, 2020*
[25] ICC, *Nov. 26, 2020*
[26] American Airlines, *Nov. 30, 2020*
[27] Daon, *VeriFLY*
[28] CommonPass, *Nov. 24, 2020*

CommonPass

Launched by the **Switzerland**-based Commons Project Foundation and the World Economic Forum, CommonPass lets individuals demonstrate their COVID-19 status while protecting their data privacy. Before boarding a flight, passengers present a QR code confirming they have satisfied their destination's entry requirements, such as a negative COVID-19 test result or vaccination by a trusted organization.

CommonPass is built on the Common Trust Network of airlines, laboratories, airports and healthcare organizations. Cathay Pacific and United Airlines have already trialed CommonPass on flights from **Hong Kong, London, New York** and **Singapore**. JetBlue Airways, Lufthansa, Swiss and Virgin Atlantic are among the other airlines that have since signed up to the app, which also has the support of Airports Council International (ACI), an organization representing 2,000 airports.[28]



TravelPass

The International Air Transport Association (IATA) is developing TravelPass in partnership with IAG, the parent company of Aer Lingus, British Airways, Iberia, Level and Vueling.[29] The app is in its final development phase and should be available for Apple devices in the first quarter of 2021, and for Android from April. TravelPass will display test results, proof of inoculation, details of national entry rules and locations for the nearest testing centers. It also links to an electronic copy of the user's passport to prove their identity. By presenting a QR code, TravelPass enables authorities to confirm that passengers have met all entry requirements, including a negative COVID-19 result. IATA hopes that TravelPass will be able to work alongside other digital passports under development.

TravelPass incorporates four open-sourced and interoperable modules, which can be combined to deliver an end-to-end solution:

- **Global registry of health requirements** – passengers receive accurate information on travel, testing and vaccine requirements for their journey
- **Global registry of testing/vaccination centers** – passengers can locate testing centers meeting the requirements of their destination
- **Lab App** – authorized laboratories and test centers can securely share test and vaccination certificates with passengers
- **Contactless Travel App** – passengers create a digital passport, receive test and vaccination certificates that are sufficient for their itinerary, and share testing or vaccination certificates with airlines and authorities to facilitate travel.

Digital health passports will help travelers manage their travel documentation digitally and seamlessly throughout their journey, improving the travel experience.

> Digital health passports will help travelers manage their travel documentation digitally and seamlessly throughout their journey.

[29] *Future Travel Experience, Nov 2020*

Track & trace apps

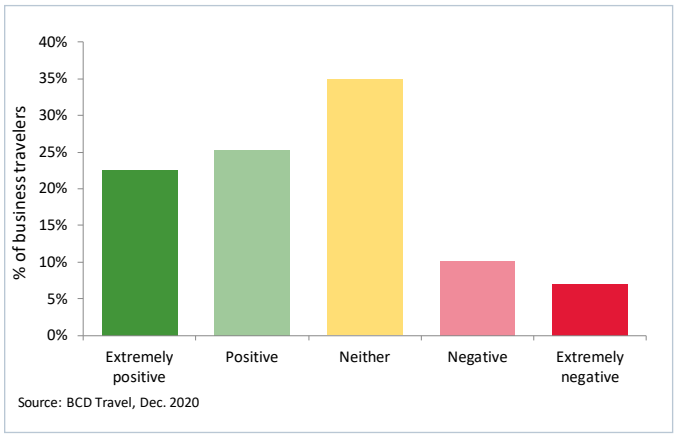
Track & trace mobile apps have already been deployed by a number of countries. By rapidly notifying users of any exposure to COVID-19, they can help reduce the spread of the disease, protecting the community and easing the burden on health workers.

About the apps

The apps are often voluntary, but their use is becoming increasingly mandatory, particularly in **Asia**, where countries are beginning to open up their borders to visitors from abroad. **Japan's** Cocoa app was initially voluntary, but it must now be used by travelers arriving from abroad to monitor and report on any changes to their health during a mandatory 14-day quarantine. **Malaysia's** MySejahtera Traveller app would also appear to be mandatory for anyone visiting the country from abroad. It's essential for confirming arrival in the country and for beginning a 14-day Home Surveillance Order quarantine.

The shift towards mandatory track & trace apps is a trend that may not be welcomed by everyone. Among those business travelers for whom track & trace is currently voluntary in their home country, just one third are currently using the apps.[30] However, the traveler response appears quite mixed if faced with the prospect of being required to use track & trace in order to make a trip to certain destinations (Figure 8). Almost one half of travelers don't see track & trace apps as an issue, but 35% are undecided about them. Less than one in five currently holds a negative view of them.

Figure 8: Travelers' opinions on track & trace apps



[30] *BCD Travel survey, 30 Nov-4 Dec. 2020*

Some countries have introduced more than one app. The **Hong Kong** government requires all arriving travelers to use StayHomeSafe, its app for tracking and enforcing 14-day quarantines.[31] All new arrivals must also wear a waterproof electronic wristband to confirm their location during quarantine. Anyone violating the quarantine order faces a fine of up to HK$25,000 ($3,226) and six months in prison. Following a spike in infections late in November 2020 at a "super-spreading event," **Hong Kong's** Secretary for Innovation and Technology has indicated that the government may make its LeaveHomeSafe track & trace app mandatory at some premises.[32] LeaveHomeSafe is used to record visits to venues and taxi rides, report positive test results, and notify of exposure to infected individuals.

Most apps claim to take care with the user's personal data, relaying only encrypted information and not releasing any personal details. Locational information should be automatically deleted after 31 days.

While track & trace apps primarily function to notify their users of close contact with someone subsequently testing positive for COVID-19, they often include a number of other features, which may be useful when deploying the apps to promote the safe resumption of international travel. These include arranging a test once alerted, locating nearby testing facilities, accessing COVID-19 guidelines and updates, health self-assessments, identifying COVID-19 hotspots, and generating QR codes for use with digital health passports.

> Track & trace apps include a number of beneficial features beyond simply tracking and tracing people.

Track & trace apps aren't just a useful tool to give a country the confidence that international travel can resume and be managed safely. They can also enable free movement at the destination. In **Malaysia** and **Singapore**, an app's QR code or reader logs a user's location and is required in order to access workplaces, hotels, restaurants, entertainment venues and when using public transportation. As checking in at these locations is often mandatory, foreign visitors are by default required to download the app on arrival in their destination.

[31] *Nikkei Asia, June 5, 2020*
[32] *South China Morning Post, Nov. 21, 2020*

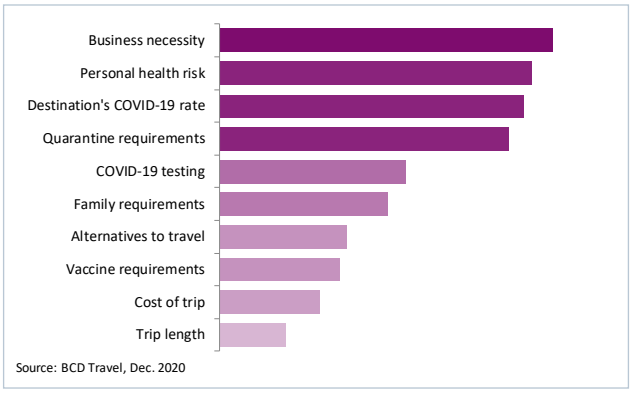
Summary

The availability of vaccines targeted at COVID-19 is clearly welcome news, but it will be some months before sufficient people are vaccinated for it alone to have a real impact on travel. For now, a vaccine will be a critical addition to a set of solutions that will help get travel firmly back on the path to a sustained recovery. Some of these solutions have already become an established part of a traveler's decision making.

When asked to identify the primary factors they now consider when deciding whether or not to travel for work, our panel of business travelers placed business necessity at the top (Figure 9). COVID-19 is making people ask more than ever if a trip is really needed.

The risk to personal health, the rate of COVID-19 infection at the destination, the need to quarantine and COVID-19 testing requirements at the destination have all emerged as primary considerations. Arguably all may be sufficiently addressed by the solutions that have emerged: vaccines, travel corridors, digital health passports, testing and track & trace apps.

Figure 9: Primary considerations in making the travel decision



Do you have questions or comments regarding this report? Please email Mike Eggleton to share your thoughts.

Mike Eggleton
Director
Research and Intelligence

Natalia Tretyakevich
Senior Manager
Research and Intelligence

About the BCD Travel survey

Between November 30 and December 4, 2020, we surveyed a panel of English-speaking business travelers from around the world on their views about travel and COVID-19. Responses were received from 702 participants: 66% came from travelers based in North America, with 22% coming from those based in EMEA (Europe (including the UK), the Middle East and Africa). On average, respondents had been travelling regularly for work for four years. Prior to the pandemic, nearly 43% of respondents were only making domestic journeys, with 46% taking both domestic and international trips, leaving just 12% making only international trips. On average, they were making three trips per year.

About BCD Travel

BCD Travel helps companies make the most of what they spend on travel. We give travelers innovative tools that keep them safe and productive, and help them to make good choices on the road. We partner with travel and procurement leaders to simplify the complexities of business travel, drive savings and satisfaction, and move whole companies toward their goals. In short, we help our clients travel smart and achieve more. We make this happen in 109 countries with almost 14,900 creative, committed and experienced people. And it's how we maintain the industry's most consistent client retention rate, with 2019 sales of US$27.5 billion. For more information, visit www.bcdtravel.com.